

REMARKS

Claims 1 and 4-13 stand rejected. No amendments to the claims are made. Claims 1 and 4-13 remain pending. Reconsideration and allowance of the pending claims is respectfully requested in light of the following remarks.

Claim Rejections – 35 USC § 112

Claims 1 and 4-13 stand rejected under 35 U.S.C. 112, first paragraph as containing subject matter which was not described in the specification in such a way to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claims 1 and 12, the Examiner noted that the limitation of “implanting impurity ions into the first and second active regions prior to formation of the tunnel oxide layer and the gate oxide layer” appears to be new subject matter which is not described in the original disclosure.

The applicant notes that in the response to the Office Action dated December 18, 2002, claims 1 and 12 were amended to incorporate the limitations of claims 2 and 3. Claims 2 and 3 were subsequently cancelled. The limitation of “implanting impurity ions into the first and second active regions prior to formation of the tunnel oxide layer and the gate oxide layer” was the limitation that appeared in original claim 3. It is well accepted that a satisfactory description may be in the claims or any other portion of the originally filed specification (MPEP 2163, section I). The limitation also appears in the original specification in the paragraph beginning on page 6, line 23. Thus, all the limitations of claim 1 and 12 are fully supported by the original disclosure, and no new subject matter is present in those claims.

Claim Rejections – 35 USC § 102(b)

Claims 1, 4-7, and 11-12 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,017,979 to Fujii et al. (“Fujii”). The applicant believes this rejection to be improper for the following reasons.

Claims 1 and 12 recite, *inter alia*, forming a device isolation layer, forming a floating gate pattern, forming a gate conductive layer, forming a tunnel oxide layer, and forming a gate oxide layer. The Examiner has apparently attributed, in section 2 of the Office Action, a single structure described in Fujii to different structures recited in claims 1 and 12. For example, the applicant’s claimed device isolation layer, tunnel oxide layer, and gate oxide layer are all allegedly disclosed by Fujii’s layer 17.

Contrary to the recited limitation, Mori explains in [1024], first sentence, that “a tunnel oxide film 21a is *first* made as a gate insulating film” (emphasis added). Then, in [1024], fifth sentence, Mori teaches that “thermal oxidation is conducted to form a gate oxide film 21b necessary for a high-voltage circuit in the peripheral circuit region.” Finally, in the last sentence of [1024] – “*Thereafter*, ion implantation is conducted in the peripheral circuit region for controlling the channel impurity concentration” (emphasis added).

It is seen in paragraph [1024] that Mori teaches away from the claimed invention by implanting impurity ions *after* formation of the tunnel oxide layer and the gate oxide layer (emphasis added). Consequently, Mori does not anticipate either claim 1 or claim 12 because both claims recite implanting impurity ions prior to formation of the tunnel oxide layer and gate oxide layer.

Claims 1 and 12 are not anticipated by Mori for at least the reason given above. Claims 4-6, 8-11, and 13 are not anticipated by Mori for at least the same reason as claim 1.

Conclusion

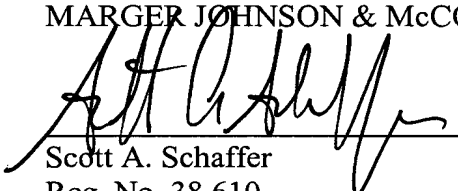
For the foregoing reasons, reconsideration and allowance of claims 1 and 4-13 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

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PATENT TRADEMARK OFFICE

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